

an optical system for guiding the first laser light and the second laser light onto a top surface and a back surface of an object to be treated, respectively,
wherein the optical system includes a filter for attenuating the first laser light,
wherein the laser beams are reshaped by the optical system to have a linear cross-section.

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6. (Amended) A method of forming a semiconductor device comprising:
irradiating a first laser light to a top surface of an object; and
irradiating a second laser light to a back surface of the object,
wherein an effective energy intensity I_0 of the first laser light to be applied onto the top surface is set at a level different from an effective energy intensity I_0' of the second laser light to be applied onto the back surface,
thereby forming a semiconductor device.

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9. (Amended) A method of forming a semiconductor device comprising:
irradiating a first laser light to a top surface of an object; and
irradiating a second laser light to a back surface of the object,
wherein an effective energy intensity I_0 of the first laser light to be applied onto the top surface and an effective intensity I_0' of the second laser light to be applied onto the back surface satisfy the relationship of $0 < I_0'/I_0 < 1$ or $1 < I_0'/I_0$,
thereby forming a semiconductor device.

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12. (Amended) A method of laser annealing, comprising the steps of:
generating laser lights from a laser source used as an oscillating source; and
irradiating a top surface and a back surface of an object with the laser lights,
wherein the laser lights to be applied onto the back surface of the object are reflected at a reflector disposed on the back surface side of the object prior to arrival at the back surface of the object,
thereby laser annealing the object.

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15. (Amended) A method of laser annealing, comprising the steps of:
generating laser lights from a laser source used as an oscillating source; and

irradiating a top surface and a back surface of an object with the laser lights,
wherein the laser lights to be applied onto the back surface of the object are
reflected at a reflector disposed on the back surface side of the object prior to arrival at the
back surface of the object, and an effective energy intensity I_0 of the laser beams to be
applied onto the top surface is set at a level different from an effective energy intensity I_0' of
the laser beams to be applied onto the back surface,
thereby laser annealing the object.

18. (Amended) A method of laser annealing, comprising the steps of:
generating laser lights from a laser source used as an oscillating source; and
irradiating a top surface and a back surface of an object with the laser lights,
wherein the laser lights to be applied onto the back surface of the object are
reflected at a reflector disposed on the back surface of the object prior to arrival at the back
surface of the object, and an effective energy intensity I_0 of the laser beams to be applied
onto the top surface and an effective energy intensity I_0' of the laser beams to be applied onto
the back surface satisfy the relationship of $0 < I_0'/I_0 < 1$ or $1 < I_0'/I_0$,
thereby laser annealing the object.

21. (Amended) A method of forming a semiconductor device, comprising the
steps of:
generating a laser light from a laser source used as an oscillating source;
dividing the laser light into a first laser light and a second laser light through an
optical system;
attenuating the first laser light by an attenuation filter;
irradiating a top surface of an object with the attenuated first laser light; and
irradiating a back surface of the object with the second laser light,
thereby forming a semiconductor device.

24. (Amended) A method for forming a semiconductor device, comprising the
steps of:
generating a laser light from a laser source used as an oscillating source;

dividing the laser light into a first laser light and a second laser light through an optical system;

attenuating the first laser light by an attenuation filter;

irradiating a top surface of an object with the attenuated first laser light; and

irradiating a back surface of the object with the second laser light,

wherein an effective energy intensity I_0 of the first laser light to be applied onto the top surface is set at a level different from an effective energy intensity I_0' of the second laser light to be applied onto the back surface,

thereby forming a semiconductor device.

27. (Amended) A method for forming a semiconductor device, comprising the steps of:

generating a laser light from a laser source used as an oscillating source; and

dividing the laser light into a first laser light and a second laser light through an optical system;

attenuating the first laser light by an attenuation filter;

irradiating a top surface of an object with the first laser light; and

irradiating a back surface of the object with the second laser light,

wherein an effective energy intensity I_0 of the first laser light to be applied onto the top surface and an effective energy intensity I_0' of the second laser light to be applied onto the back surface satisfy the relationship of $0 < I_0'/I_0 < 1$ or $1 < I_0'/I_0$,

thereby forming a semiconductor device.

30. (Amended) A laser apparatus, comprising:

a laser source for emitting a laser light;

a half mirror for dividing the laser light into a first laser light and a second laser light;

an optical system for guiding the first laser light and the second laser light onto a top surface and a back surface of an object to be treated, respectively,

wherein the optical system includes a filter for attenuating the second laser

light;

a substrate holder for holding a substrate,

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wherein a semiconductor film is formed over the substrate.

31. (Amended) A method for forming a semiconductor device comprising the steps of:

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generating a laser light from a laser source used as an oscillating source;
dividing the laser light into a first laser light and a second laser light through an optical system;

attenuating the second laser light by an attenuation filter;
irradiating a top surface of an object with the first laser light; and
irradiating a back surface of the object with the attenuated second laser light;
thereby forming a semiconductor device.

32. (Amended) A method for forming a semiconductor device, comprising the steps of:

generating a laser light from a laser source used as an oscillating source;
dividing the laser light into a first laser light and a second laser light through an optical system;

attenuating the second laser light by an attenuation filter;
irradiating a top surface of an object with the first laser light; and
irradiating a back surface of the object with the attenuated second laser light,
wherein an effective energy intensity I_0 of the first laser light to be applied onto the top surface is set at a level different from an effective energy intensity I_0' of the second laser light to be applied onto the back surface,
thereby forming a semiconductor device.

Please add new claims 34-36

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--34. A method for forming a semiconductor device, comprising:

generating a laser light from a laser source used as an oscillating source;
dividing the laser light into a first laser light and a second laser light through an optical system;
attenuating the first laser light; and

irradiating a surface of an object with the attenuated first laser light and the second laser light at a same position,

wherein an effective energy intensity I_0 of the first laser light is set at a level different from an effective energy intensity I_0' of the second laser light at the same position.

35. A method for forming a semiconductor device, comprising:

generating a laser light from a laser source used as an oscillating source; and

dividing the laser light into a first laser light and a second laser light through an optical system;

attenuating the first laser light;

irradiating a surface of an object with the attenuated first laser light and the second laser light at a same position,

wherein an effective energy intensity I_0 of the first laser light and an effective energy intensity I_0' of the second laser light satisfy the relationship of $0 < I_0'/I_0 < 1$ or $1 < I_0'/I_0$ at the same position.

36. A laser apparatus comprising:

a laser source;

an optical system for guiding laser beams emitting from the laser source onto a top surface and a back surface of an object to be treated; and

a stage for holding the object,

wherein the laser apparatus further comprises a reflector disposed between the object and the stage.--